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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/872,934	06/02/2001	Steven Olson	C01-011	3261

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EXAMINER

FLEMING, FRITZ M

ART UNIT	PAPER NUMBER
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2182

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/872,934

Applicant(s)

OLSON ET AL.

Examiner

Fritz M. Fleming

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/2/2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 March 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


FRITZ FLEMING
PRIMARY EXAMINER
GROUP 2100

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Drawings

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

Replacement Drawing Sheets

Drawing changes must be made by presenting replacement sheets which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments section, or remarks, section of the amendment paper. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). A replacement sheet must include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless applicant is notified.

Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and within the top margin.

Annotated Drawing Sheets

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be submitted or required by the examiner. The annotated drawing sheet(s) must be clearly labeled as "Annotated Sheet" and must be presented in the amendment or remarks section that explains the change(s) to the drawings.

Timing of Corrections

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in ABANDONMENT of the application.

If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may **NOT** be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability.

In this instance, the sheets have been approved for content, but are not properly labeled as "Replacement (New) Sheet".

1. The drawings were received on 3/2/2005. These drawings are acceptable for substance, but unacceptable for format as they are not properly labeled as "Replacement (New) Sheet".

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

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were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ludtke et al. (Ludtke) in view of Koyama and Robinson.

Ludtke provides a network (i.e. Figure 1) to connect a video camera 10 to a host 18 having a UI, such that the video camera 10 sends characteristic information over the network to the host 18 and the UI such that the UI is used to then configure the camera 10 so that it can be used on the network. Attention is drawn to Figures 2-4 in which the characteristic information that is transmitted from the video camera 10 to the host 18, so that the user interface of Figures 5-8 can be used to configure the video camera 10 for use on the network. Note that Figure 5 is specifically shown as the "configuration window 62 that is displayed on the computer system 18 and provides to a user a graphical representation representing the devices within a1 configuration". Per column 9, the detailed information includes information obtained from the device's ROM 20, including device specific data, which detailed information is presented to the user via the user interface of the computer 18. Columns 4-8 detail the self describing information in the ROM 20 and how such is responsible for "including information which can be used to generate a graphical representation of the device for use with a graphical user interface" (column 4, lines 10-21) which represents a sending of

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characteristic information over the network in order to configure the device via the host UI over the network. What is lacking is a heterogeneous set of vision processors.

Koyama in the same field of self ID over a network, shows a heterogeneous set of digital video cameras 101,102, in that they are heterogeneous in the case of the information of 302 per Figure 4 in that such accounts for digital cameras of differing capabilities and functionality. Depending on the information in each configuration ROM, the control unit 503 in the host 103 controls the digital interface 108, thereby controlling the communication, which is a configuration. Note also how image processing depends on the results of the detection [0074]. The overall configuration is shown in the steps of Figure 6, in which the DVCs (digital video camera) identify themselves via the configuration ROM over the network to the host, so that the host, with its user interface (i.e. digital interface 108 and display unit 106) can configure the DVCs over the network, so as to allow the user via the host 103 to execute various controls on the images provided [0083-0084].

Robinson provides definitions of what constitutes a vision processor in a machine vision system. Figure 1 shows a machine vision system 20, which uses a digital camera 25. A camera 24 uses a digitizer/frame grabber 22. The digitizer frame grabber 22 may comprise a vision processor board per column 5 lines 1-2. The digital camera 25 eliminates the need for the digitizer frame grabber 22. Thus it is clear that the digital camera 25 is a vision processor, as it has the functionality of the digitizer frame grabber that is the vision processor.

Thus it would have been obvious to one having ordinary skill in the art at the time that the invention was made to modify Ludtke per the teachings of Koyama and Robinson such that heterogeneous vision processors can be configured over the network, based upon identification information sent from each vision processor over the network to the host.

Per claims 2-4, the combined references set forth the transmission of a plurality of VP characteristics to include identification codes and functions executable at the VP. Per claims 5-7, Ludtke teaches the use of a driver software in the self identification information in the form of a JAVA executable program (column 5, lines 1-25), thereby rendering obvious an executable program that configures a plurality of VP functions and parameters. Thus the executable JAVA represents a thin client at the host, which ultimately provides the UI. Per claim 8, the combined references teach the use of a plurality of VP identification codes via the configuration ROMs. The same applies to the claim 9 plurality of functions. Connection to the VP using a thin client is rendered obvious by Ludtke, as a URL is provided by the ROM, which can point to a location within the target device itself. Thus in order to access the URL on the VP, a web browser (hence thin client) is needed, and thus suggested by the teachings of Ludtke.

Amended claim 1 limitations:

The claim has been amended to include sending VP processor characteristic information, to include hardware and software characteristics, from one of the heterogeneous set of VPs to the at least one host, and then using the UI to configure the VP via the network.

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Ludtke teaches much more than the abstract pointed to in applicants' response. For example, Figures 2-4 indicate hardware information at the control descriptor section 28 which includes a description of each available physical button or control included on the device 10 (col. 6, lines 43-55). For example, the functionality descriptor section 30 of the ROM 20 includes information which provides access to the control interface used by the device 10, which in turn provides the information necessary for the host computer system 18 to invoke appropriate commands for controlling the operation of the device 10 with the available controls. See column 7, lines 1-7. This information is used to include driving software for enhancing the graphical user interface and controlling the operation of the device (column 4, lines 18-21). This information is used to configure the devices 10 for use and control by the host computer 18 via the user interface at the host computer.

Koyama teaches, as pointed out above, in Figure 6 that the DVCs 101/102 report their IDs to the host PC 503 so that the host can ultimately control the digital interface 108 at the DVC, which is a configuration [0075-0086]. Information transmitted from each DVC to the host includes hardware 401 and software information 404-406 contained in Figure 4 [0065-0070].

Robinson is discussed above.

New claims 12-20:

Claim 12: At least one of the acquisition size of a digital camera is seen as the image format (i.e. NTSC or PAL—403 of Koyama) , as the sizes of images are different for NTSC vs. PAL.

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Claim 13: At least one of the communications protocols is that of 404-406 of Koyama.

Claim 14: At least one of the serial number is 303 of Koyama.

Claims 15,16: Although no specific mention is made of the particular RS-232 format, Ludtke and Koyama each use a serial bus (IEEE 1394), while specifically teaching that other busses may be used (Ludtke col. 5, lines 55-60). As the RS-232 format is notoriously well known in the art (the examiner takes official notice that RS-232 is well known), then it would have been obvious to one having ordinary skill in the art to substitute one type of serial bus for another, as Ludtke has taught that other busses can be used. Note also that Koyama teaches bit 406 to signify the use of "serial bus protocol 2", which is used to control communications with other devices. In the case of the use of a bus that requires set up information, such is obviously communicated to the host in order to ensure proper configuration and functionality.

Claim 17: Koyama teaches system specific global software configuration parameters at 404-406.

Claim 18: Koyama teaches system specific software configuration of each digital input at 404-406.

Claim 19: Koyama teaches system specific network parameters at 401-406 or address 203.

Claim 20: software characteristics that are individually specified and executed by the VP are seen at Ludtke control descriptor section 28 which includes a description of each physical button or control included on the device 10 (col. 6, lines 43-45).

Response to Arguments

5. Applicant's arguments filed 3/2/2005 have been fully considered but they are not persuasive. The specifics of the amended limitations are addressed in the body of the rejection. The new claims are also addressed above.

However, the response merely discusses the abstract of Ludtke, when in fact, much more than the abstract was relied upon. The amended material is quite broad, noting that the information only include hardware and software characteristics, addressed in detail above.

The non-art rejections and objections have been overcome, except that the drawings should have been labeled as "Replacement".

The objections and rejections not repeated from the first Office action have been overcome.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Conoval is cited to support the taking of official notice that RS-232 is well known for a camera to computer communications protocol, see especially column 13, lines 45-65 for start, stop and parity bits, and baud rates at lines 10-25.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

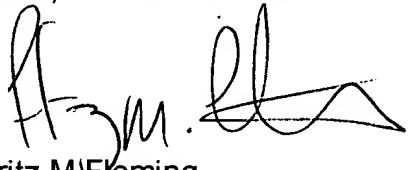
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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fritz M. Fleming whose telephone number is 571-272-4145. The examiner can normally be reached on M-F, 0600-1500.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Fritz M. Fleming
Primary Examiner
Art Unit 2182

fmf